

Memorandum

To: Panel Members Date: April 25, 2002

From: Creighton Chan, Manager
Peter DeMauro, General Counsel Analyst: D. Woodside

Subject: One-Step Agreement for **Victron, Inc.**
(www.victron.com)

CONTRACTOR:

- Training Project Profile: Retraining: companies w/out-of-state competition
- Legislative Priorities: Stimulating Exports/Imports
Moving to a High Performance Workplace
Promotion of California's Manufacturing Workforce
- Type of Industry: Manufacturing
- Repeat Contractor: No
- Contractor's Full Time Employees:
 - Company Wide: 320
 - In California: 320
- Fringe Benefits: Yes
- Union Representation: No
- Name and Local Number of Union
representing workers to be Trained: N/A

CONTRACT:

- Program Costs: \$391,380
- Substantial Contribution: \$0
- Total ETP Funding: \$391,380
- In-Kind Contribution: \$425,538
- Reimbursement Method: Fixed-Fee
- County(ies) Served: Alameda
- Duration of Agreement: 24 months

SUBCONTRACTORS:

California Training Administration (CTA), located in San Jose, California, will conduct a portion of project administrative services for an amount not to exceed \$39,138.

This project will primarily use in-house trainers. However, the Contractor may need to utilize training vendors for some of its training. The Contractor understands that the vendors must be California-based, that it must notify ETP prior to the use of any vendor, and that it must have a subagreement on file prior to the start of training by that vendor.

THIRD PARTY SERVICES:

California Training Administration (CTA) helped prepare the application for a flat fee of \$5,500.

NARRATIVE:

Established in 1983, Victron, Inc. is a printed circuit board manufacturer providing a full array of services including prototype research, design, testing, assembly, contract manufacturing, and engineering services. The company sells its products on a global basis to customers in computer/peripherals, communications, medical and mechanical instrumentation, automotive and consumer electronics industries. Victron has a total of 320 Californians employed at its 110,000 square foot manufacturing facility located in Fremont, California.

Victron differentiates itself from its competitors through its New Products Department, which develops short-run prototypes, and by providing a "Total Service" solution that delivers quality products meeting the latest industry standards at a competitive price. The company must often compete with offshore manufacturers paying as little as 50 cents per hour. To meet these competitive pressures, Victron must invest in state-of-the-art manufacturing equipment and computer systems and implement a high performance workplace where all employees can be relied upon to improve processes and meet constantly evolving customer demands for quality. Thus, Victron is requesting the Panel's assistance to implement its first formal training program to retrain 285 front-line workers in more complex job skills through a significant amount of classroom and structured, on-site training.

Trainees will receive between 72-200 hours of training from a curriculum which includes Computer Skills, Manufacturing Skills, Hazardous Materials, Business Skills, and Continuous Improvement. The Manufacturing Skills training proposed for the ETP project will cross-train all production workers, engineers and technicians in new skills to design, manufacture and test electronic products. Victron must ensure all production workers are cross-trained on all of the SMT (Surface Mount Technology), PTH (Pin-through-Hole), BGA (Ball Grid Array - Inspection Machine) and fine pitch robotic placement equipment and in a variety of skills sets such as printed circuit board assembly, in-circuit testing, static burn-in, and system integration.

A major focus of this retraining effort will be in the provision of Continuous Improvement skills. To compete in the current contract manufacturing market, Victron must maintain a minimum rate of defective products and employees must work as a unified team using a common language and process improvement techniques. Victron will use its current management and engineering staff to deliver Continuous Improvement training to all frontline employees.

NARRATIVE: (continued)

The training will guide the employee through problems and solutions from start to finish including how to utilize Statistical Process Control at all critical steps in the manufacturing process. This training will assist Victron to adapt to a High Performance Workplace where the management team will be able to place a greater reliance on the workers and empower them to contribute to increased productivity and customer satisfaction.

Computer Skills training provides technology skills to enable engineers, program managers and technicians to design and test a new customer's product before it can be implemented on the manufacturing floor for full production. Upon completion of the training, trainees will understand how to implement new components, materials, chemicals and test strategies customized for customers with zero defects. Retraining will expand workers' technical knowledge of Electronic Manufacturing technology, Factory Automation System Operation, Design for Test, High Speed Digital Logic and New Soldering requirements for lead free products. Victron must also provide skills to purchasing, accounting and manufacturing employees to utilize the new internally developed materials and manufacturing tracking system called VIP (Victron Information and Planning). This system allows the worker to track materials, create reports, account for material usage and support on-time delivery of customer's products.

Hazardous Materials training will provide supervisors and production workers with additional skills to correctly store, label, and contain new chemicals and hazardous materials. None of this training is government-mandated and the number of training hours will be limited to 10 percent of the job-specific skills. Also included in this type of training is equipment and tool safety cross training. The remaining Types of Training include Business and Leadership skills. Victron has a tradition of promoting from within, resulting in engineers and technical staff becoming managers and supervisors. These employees lack the written and verbal skills to communicate both internally with staff and externally with the customer to determine the most cost-effective solution. This training will also include managing technical professionals, giving effective presentations to customers, developing business plans for future products and managing projects within the trainee's work area.

Training will be provided by qualified, in-house trainers and California-based vendors. Administrative services will be provided by CTA in conjunction with the Contractor.

Supplemental Nature of Training

In the past, Victron provided on-the-job training to primarily new and temporary production workers on standard manufacturing equipment, standard work processes, and orientation related to basic assembly techniques. Classes were limited to basic safety, orientation, and production skills for newly hired workers and infrequent seminars for engineering and executive staff. For instance, Victron has only a few Quality Engineers who understand and maintain the company's quality statistics, identify the defects and troubleshoot problems. The Continuous Improvement training will now be available across the entire workforce allowing the company to begin progressing to a high performance workplace. In addition, because of the company's expansion, technological advances, and increased customer requirements, the lack of any formal, company-wide training program is no longer viable. The company has stated in writing that all ETP training outlined in the curriculum will provide new skills that have not been available to employees in the past. Because of the highly technical nature of most of the ETP-funded training, and because of the amount of classroom training, the cost of implementing this program will exceed the ETP reimbursement. Without ETP funds, Victron could not provide the significant number of classroom hours included in the ETP training plan and the company would have to forego the more expensive technology training needed to effectively compete in the electronic manufacturing industry.

NARRATIVE: (continued)

In-Kind Contribution

Victron, Inc., will contribute \$374,797 in wages paid to ETP trainees while they attend training. In addition, vendor and in-house trainer costs, which exceed the ETP reimbursement, will be at least \$50,741 for a total in-kind contribution of \$425,538. Victron will also train 35 of its full-time and temporary employees who will not be eligible for ETP funded training at its own expense.

PROPOSED ACTION:

Staff recommends that the Panel approve this One-Step Agreement if funds are available and the project meets Panel priorities. This recommendation is based on Victron's statement that this training will result in improved competitiveness and productivity and higher skill levels among its front-line workers. In addition, this proposed training will accelerate the company's efforts to become a high performance workplace.

TRAINING PLAN:

| Grp/Trainee Type | Types of Training | No. Retain | No. Class/Lab Videocnf. Hrs | No. CBT Hrs | No. SOST Hrs. | Cost per Trainee | Hourly Wage after 90 days |
|---|---|-------------------|------------------------------------|--------------------|--|---|----------------------------------|
| 1-5 Retraitees | Manufacturing Skills, Computer Skills, Continuous Improvement, Hazardous Materials, and Business Skills | 285 | 24-120 | 0 | 48-120 | \$696-\$2,200 | *\$12.16-\$50.48 |
| | | | | | <u>Range of Hourly Wages</u> *\$12.16- \$50.48 | | |
| | | | | | <u>Prevalent Hourly Wage</u> \$14.05 | | |
| | | | | | <u>Average Cost per Trainee</u> \$1,373 | | |
| <u>Health Benefit used to meet ETP minimum wage:</u> Health benefits of at least \$1.91 per hour may be added to the trainee's wages to meet the ETP minimum hourly wage of \$12.16 per hour for Alameda County. | | | | | <u>Turnover Rate</u> 16.5% | <u>% of Mgrs & Supervisors to be trained:</u> N/A | |

VICTRON MENU CURRICULUM

Hours

Trainees will receive any of the following Types of Training

class/lab SOST Trainer

24-120 144-1240

Manufacturing Skills

Material Prep
Auto Insertion
Surface Mount Assembly, Electronic Assembly
First Hardware
Wave Solder

Second Operation
ICT, Test, Burn-in, Workflow, Final Test
Surface Mount Technology
Surface Mount Rework
Rework processes
Work in Process
Component ID: Passive, Active, Electro Mechanical
Component ID: Discreet, Hardware
Manufacturing Electronics
Electro-Static Discharge (ESD)
Hand Soldering for Terminals

Electronic Assembly Handling
Through Hole Technology
Soldering Techniques
Soldering Rework
Electronic Assembly
Rework of Surface Mount Technology (SMT)
Components 1, 2
SMT Solder Joint Certification
Cleanroom processes
Product and Process Training
Workplace Communications
Component Manufacturing Skills
Packaging and Shipping
Operating / Maintaining SMT Machine
Technical Training Skills
Just-in-Time Techniques (JIT)
Inspection Techniques, Sampling Inspection

SOST Trainer Activity Plan

Work with trainees to identify defects
Identify Problems within the work area
Work with trainees to operate and inspect equipment
Assist trainees to use schematics and visual documents
Assign tasks to evaluate trainee's skill level
Assist trainees to use tools and equipment correctly
Monitor & Inspect Completion of Work

Competencies:

Trainee will be able to utilize new knowledge and skills in order to use the new Printed Circuit Board (PCB) equipment to manufacture electronic products with zero defects.

Hazardous Materials*

Chemical Handling
Forklift usage with Hazardous Materials
Equipment Safety Procedures
Material Handling (Hazard / Non Hazard)
Hazardous Waste Cleaning

SOST Trainer Activity Plan

Work with trainees to identify Hazardous materials
Assist trainees to use and handle new chemicals correctly
Monitor trainee as they work with new chemicals

Competencies:

Trainee will be able to handle and contain dangerous chemicals that are new in their production process.

* Training is limited to 10% of the total job-specific hours.

VICTRON MENU CURRICULUM

ET02-0328
Reference No. 02-0309
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Exhibit B

Continuous Improvement

Continuous Improvement Processes
High Performance Work teams
Problem Solving
Understanding Social Styles
Team Development
Design of Experiments (DOE)
SPC System
Six Sigma
Quality Management
Design for Test
Design for Manufacturability

SOST Trainer Activity Plan

Work with trainees to form teams
Identify Problems and help to solve them
Coach team meetings
Assist trainees to develop assessments and corrective actions
Assist trainees to use evaluation and tracking tools
Critique trainees in improving the process
Assist trainees in using troubleshooting techniques

Competencies:

Trainee will be able to utilize new knowledge and skills to work as a team member to identify and solve problems.

VICTRON MENU CURRICULUM

ET02-0328
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Exhibit B

Computer Skills

MS Excel

MS Powerpoint
MS Windows / Windows 2000

MS Word
WinZip

Microsoft Tools and Documents
Outlook Express
Software - Using Projects
Lotus Notes
MS Access
MS Project
Adobe Photshop
APICS - Overview of Manufacturing
APICS - Inventory Management
APICS - JIT
APICS - Material & Capacity Requirements
APICS - Production Activity Control
APICS - Systems and Technology
APICS - Master Production Schedule
MRP Planner / Buyer Skills
APICS - Supply Chain Management
APICS - Master Planning
Oracle Training
Hightspeed Digital Logic
Soldering Requirements and Materials
Electronic Component Designs for Engineering

Technology Advances

VIP - Victron Informational Planning System
Part Transfer Process
Manufacturing Resource Planning (MRP)
Process
Training and Execution

ECO Process (Engineering Change Orders)
Receiving Inspection (RI)
Material Review Board Component (MRB)
Material Review Board PCBA (MRB)
Purchase Price Variances (PPV) Process
Purchase Order (PO) Processing
New Cancellations Processing
Understanding Gerber Files
CAD data and Net List
Auto CAD, Acrobat and GC Preview
Manufacturing Documentation Processes
General Accounting
Cost Accounting
Sales Order Management
MPS Requirements
Return To Vendor (RTV) C24Process
Cycle Counting
Physical Inventory
Excess & Obsolete Inventory
Factory Automation Designs for Engineers
Approved Manufacturers List (AML)

SOST Trainer Activity Plan

Work with trainees to use the computer system in their work area
Assist trainees to develop processes for implementing software in their job
Assign tasks to evaluate trainee's skill level
Critique trainees in their use of software tools
Assist trainees in using the software and hardware tools to improve job performance

Competencies:

Trainee will be able to use new software and hardware to improve job performance and productivity.

VICTRON MENU CURRICULUM

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Exhibit B

Business Skills

Business

Price/Cost Analysis
Project Assessment
Supplier Performance Management
Effective Workplace Communications
Advanced Workplace Communications
Time Management

Project Management
Effective Presentation Skills
Business & Report Writing
Finance for Non Financial Managers
Project Planning
Effective Negotiation Skills
Program Management

Leadership / Coaching

Business Development
Business Strategy
Decision Making Processes

Data Gathering
Managing Total Compensation
Coaching & Communicating for Results
Coaching to Commitment
Proactive Listening & Understanding
Giving/Receiving Constructive Feedback
Coaching/Conducting Effective Team Meetings
Developing Leadership
Exercising Influence
Dealing with Behavioral & Performance Issues

Rewards and Recognition/Motivation
Facilitating Improved Performance
Guiding the Development of Others
Building/Coaching Constructive Relationships
The Responsibilities of Team Leader
Leadership Communications
Effective Team Leader
Strategic Planning
Organizational Capability & Change
Organize for Success
Dealing with Conflict
Facilitator/Coaching Skills
Management/Leadership Fundamentals
Performance Management
Managing Multiple Projects

Leadership / Coaching skills for the new supervisor
Creative Thinking for improving work environment

SOST Trainer Activity Plan

Work with trainees to form and coach teams and projects
Identify problems within the work area
Assign tasks to evaluate trainee's skill level
Critique trainees in their use of business and leadership tools
Assist trainees in using the business tools to improve job performance

Competencies:

Trainee will be able to interact with employees and coach teams and projects.